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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/538,580	06/15/2005	Rainer Pietig	DE 020318	9054	
	7590 04/23/2007 LLECTUAL PROPERT	Y & STANDARDS	EXAM	INER	
P.O. BOX 3001		T & STANDINGS	DE 020318 9054  EXAMINER  JONES, STEPHEN E	EPHEN E	
BRIARCLIFF I	MANOR, NY 10510		ART UNIT	PAPER NUMBER	
			2817		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MO	NTHS	04/23/2007	PAP	ER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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-	Application No.	Applicant(s)	1
	10/538,580	PIETIG, RAINER	
Office Action Summary	Examiner	Art Unit	
	Stephen E. Jones	2817	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	ON. timely filed  m the mailing date of this communicati IED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 27 /	<u>March 2007</u> .		
2a) This action is <b>FINAL</b> . 2b) ⊠ This	s action is non-final.		
3) Since this application is in condition for allowa			is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-8 is/are pending in the application.			
4a) Of the above claim(s) 6-8 is/are withdrawn	from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1 and 4</u> is/are rejected.			
7) Claim(s) <u>2,3 and 5</u> is/are objected to.			•
8) Claim(s) <u>1-8</u> are subject to restriction and/or e	election requirement.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10)⊠ The drawing(s) filed on 15 June 2005 is/are: a	a)⊠ accepted or b)⊡ objected to	by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is o	bjected to. See 37 CFR 1.121	(d).
11) The oath or declaration is objected to by the E	xaminer. Note the attached Offic	e Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreigr a) All b) Some * c) None of:	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).	
1. Certified copies of the priority document	ts have been received.		
<ol><li>Certified copies of the priority document</li></ol>	ts have been received in Applica	tion No	
<ol><li>Copies of the certified copies of the prior</li></ol>	rity documents have been receive	ved in this National Stage	
application from the International Burea			
* See the attached detailed Office action for a list	of the certified copies not receiv	red.	
Attachment(s)			
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summar Paper No(s)/Mail [		
Information Disclosure Statement(s) (PTO/SB/08)	5) D Notice of Informal		
Paper No(s)/Mail Date <u>6/15/05,9/5/06</u> .	6)  Other:		

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## **DETAILED ACTION**

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## Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 3/27/07 is acknowledged.

2. Claims 6-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 3/27/07

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marusawa et al. (JP09294006) in view of Maruhashi et al. (US 2001/0028280).

Marusawa (Figs 2-4) teaches an irreversible (i.e. nonreciprocal) circuit device including: a plurality of strip conductors (e.g. 12a-c) that cross over each other and are insulated from each other by ferrite layers (11); and a permanent magnet (e.g. 23 in Fig. 4) provides biasing; and the three conductors cross each other at equal angles (i.e. at 120 degrees) as shown in Figs. 2-3.

However, Marusawa does not teach that the material where the conductors cross each other is a hard magnetic material which is permanently magnetized in a spatial direction perpendicular to the conductor planes.

. . . .

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Maruhashi teaches a hard ferrite magnet material (i.e. a permanent magnet material) can be used instead of using soft ferrite in combination with a permanent magnet located above the nonreciprocal device (see [0056] of Maruhashi).

It would have been considered obvious to one of ordinary skill in the art to have substituted a hard ferrite material such as taught by Maruhashi in place of the soft ferrite material in the Marusawa device, because it would have provided the advantageous benefit of a further miniaturized device because the permanent magnet could be eliminated since the hard ferrite provides the necessary bias such as taught by Maruhashi, thereby suggesting the obviousness of such a modification.

## Allowable Subject Matter

5. Claims 2-3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEJ

STEPHEN E. JONES